

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2004/000214

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: E21B 47/00, E21B 44/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: E21B, G01V, G09F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5202680 A (G.M. SAVAGE), 13 April 1993 (13.04.1993), whole document --	1-12
A	WO 0169041 A1 (SANDVIK TAMROCK OY), 20 Sept 2001 (20.09.2001) --	1-12
A	WO 0225319 A2 (WEATHERFORD/LAMB, INC.), 28 March 2002 (28.03.2002) --	1-12
A	EP 0367495 A2 (AMOCO CORPORATION), 9 May 1990 (09.05.1990) -- -----	1-12

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

\* Special categories of cited documents

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

29 July 2004

Date of mailing of the international search report

02 -08- 2004

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

30/04/2004

International application No.

PCT/FI 2004/000214

US	5202680	A	13/04/1993	NONE		
WO	0169041	A1	20/09/2001	AU	4659901 A	24/09/2001
				CA	2403124 A	20/09/2001
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				JP	2003527514 T	16/09/2003
				US	6616244 B	09/09/2003
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				DE	68915116 D,T	18/08/1994
				EG	18740 A	30/12/1993
				US	5134271 A	28/07/1992